

Ow Yes!

- Gravity **14.3 BLG**
- ABV **5.9 %**
- IBU **37**
- SRM **26.3**
- Style **Foreign Extra Stout**

Batch size

- Expected quantity of finished beer **23 liter(s)**
- Trub loss **5 %**
- Size with trub loss **24.1 liter(s)**
- Boil time **60 min**
- Evaporation rate **10 %/h**
- Boil size **27.8 liter(s)**

Mash information

- Mash efficiency **75 %**
- Liquor-to-grist ratio **3 liter(s) / kg**
- Mash size **19 liter(s)**
- Total mash volume **25.3 liter(s)**

Steps

- Temp **50 C**, Time **20 min**
- Temp **61 C**, Time **30 min**
- Temp **70 C**, Time **30 min**
- Temp **78 C**, Time **15 min**

Mash step by step

- Heat up **19 liter(s)** of strike water to **55C**
- Add grains
- Keep mash **20 min** at **50C**
- Keep mash **30 min** at **61C**
- Keep mash **30 min** at **70C**
- Keep mash **15 min** at **78C**
- Sparge using **15.1 liter(s)** of **76C** water or to achieve **27.8 liter(s)** of wort

Fermentables

Type	Name	Amount	Yield	EBC
Grain	Simpsons - Maris Otter	5 kg (79.1%)	81 %	6
Grain	Płatki owsiane	0.7 kg (11.1%)	85 %	3
Grain	Roasted Barley	0.42 kg (6.6%)	55 %	591
Grain	Strzegom Czekoladowy ciemny	0.2 kg (3.2%)	68 %	1200

Hops

Use for	Name	Amount	Time	Alpha acid
Boil	Cascade	20 g	60 min	6 %
Boil	Cascade	20 g	45 min	6 %
Boil	East Kent Goldings	25 g	30 min	5.1 %
Boil	East Kent Goldings	25 g	15 min	5.1 %
Aroma (end of boil)	Cascade	10 g	0 min	6 %

Yeasts

Name	Type	Form	Amount	Laboratory
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Safale US-05	Ale	Dry	11 g	Fermentis
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